



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

Glenn

SEP 12 2007

RECEIVED

SEP 17 2007

SURFACE WATER
QUALITY BUREAU

REPLY TO: 6WQ-NP

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7001 0360 0003 6669 4797)

Ms. Anne Wagner, Manager
Environmental and Public Policy
Chevron Mining Inc.
P. O. Box 469
Questa, NM 87556

Re: NPDES Permit No. NM0022306

Dear Ms. Wagner:


This is in response to the request that the name on the above referenced permit be changed from Molycorp, Inc. to Chevron Mining Inc.

Our records and the issued permit have been changed in accordance with the information provided; however, this change of ownership does not absolve any obligations or liabilities incurred under the terms and conditions of this permit during the period of previous ownership. The Environmental Protection Agency specifically retains all rights and remedies provided by law for the enforcement of such terms and conditions.

Enclosed is a corrected copy of the cover page of your NPDES permit. Please discard the incorrect copy.

If we may be of further assistance, please feel free to contact Diane Smith at the above address or telephone (214) 665-2145.

Sincerely yours,


Miguel I. Flores
Director

Water Quality Protection Division

Enclosure

cc: NMED

Internet Address (URL) • <http://www.epa.gov>

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Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. **NM0022306**

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended,
(33 U.S.C. 1251 et. seq; the "Act"),

Chevron Mining Inc.
P. O. Box 469
Questa, NM 87556

is authorized to discharge from a facility located near Questa in Taos County,

to receiving waters named the Red River, Waterbody Segment Code No. 20.6.4.122 of the Rio Grande Basin,

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Parts I [Requirements for NPDES Permits - 18 pages], II [Other Conditions - 23 pages], and III [Standard Conditions for NPDES Permits - 8 pages] hereof.

This permit supersedes and replaces NPDES Permit No. NM0022306 issued December 8, 2000

This permit shall become effective on October 1, 2006

This permit and the authorization to discharge shall expire at midnight, September 30, 2011

Issued on August 29, 2006

Prepared by

Miguel I. Flores

Director

Water Quality Protection Division (6WQ)

J. Scott Wilson

Environmental Scientist

NPDES Permits Branch (6WQ-P)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

NOV 09 2006

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7004 1160 0003 0360 9637)

Roy Torres
Operations Manager
Molycorp, Questa Mine
P.O. Box 469
Questa, NM 87556

RECEIVED

NOV 17 2006

Re: NPDES Permit No. NM0022306
Public Notice of Final Decision

SURFACE WATER
QUALITY BUREAU

Dear Mr. Torres:

The permit recently issued to Molycorp, contains several typographical errors. Following regulations listed at 40CFR122.63(a), the following minor permit modifications are made:

PAGE 6, 9, and 10 OF PART I

Errors in the cyanide limits and monitoring requirements were corrected.

PAGE 8 OF PART I

The footnotes were corrected

PAGE 2 OF PART II

An error in the composite sampling language was corrected.

PAGE 6 OF PART II

Outdated methods were corrected

The corrected page(s) are enclosed.

If you have any questions on any aspect of this minor permit modification, please feel free to contact the permit writer, J. Scott Wilson, by telephone at:214-665-7511, FAX:214-665-2191, or E-mail: wilson.js@epa.gov.

Sincerely yours,

Willie Lane
Chief
Permits Section (6WQ-PP)

Enclosure(s)

cc (w/enclosures):

New Mexico Environment Department

Total Lead STORET: 01051	0.55	0.82	0.1	0.15
Total Manganese STORET: 01055	5.46	8.2	1.0	1.5
Total Mercury (*3) STORET: 71900	0.0006	0.00093	0.00011	0.00017
Total Mercury (*4) STORET: 71900	0.000336	0.0005	0.001	0.0014
Total Molybdenum STORET: 01062	9.6	14.7	3.3	5.03
Total Zinc STORET: 01092	0.58	0.58	0.2	0.2
Total Aluminum STORET: 01105	0.169	0.254	0.058	0.087

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow STORET: 50050	Continuous	Record
Total Suspended Solids STORET: 00530	1/Quarter	24-Hr. Composite (*5)
Total Arsenic STORET: 01002	1/Month	24-Hr. Composite (*5)
Total Cadmium STORET: 01027	1/Month	24-Hr. Composite (*5)
Total Copper STORET: 01042	1/Month	24-Hr. Composite (*5)
Total Cyanide STORET: 00720	1/Month	24-Hr. Composite (*3)
Fluoride STORET: 00951	1/Quarter	24-Hr. Composite (*5)
Total Iron STORET: 01045	1/Month	24-Hr. Composite (*5)
Total Lead STORET: 01051	1/Month	24-Hr. Composite (*5)
Total Manganese STORET: 01055	1/Month	24-Hr. Composite (*5)
Total Mercury STORET: 71900	1/Month	24-Hr. Composite (*5)
Total Molybdenum STORET: 01062	1/Quarter	24-Hr. Composite (*5)
Total Zinc STORET: 01092	1/Quarter	24-Hr. Composite (*5)
Total Aluminum STORET: 01105	1/Month	24-Hr. Composite (*5)

 WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*6)		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	****	Report
STORET: TOP6C	****	Report
STORET: TPP6C	****	Report
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	****	Report
STORET: TOP3B	****	Report
STORET: TPP3B	****	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	1/quarter	24-Hr. Composite (*5)
STORET: TOP6C	1/quarter	24-Hr. Composite (*5)
STORET: TPP6C	1/quarter	24-Hr. Composite (*5)
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	1/quarter	24-Hr. Composite (*5)
STORET: TOP3B	1/quarter	24-Hr. Composite (*5)
STORET: TPP3B	1/quarter	24-Hr. Composite (*5)

 SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): After collection of the combined seepage from the tailings impoundment and prior to discharge to the Red River.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

FOOTNOTES

- *1 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting through one (1) day prior to three (3) years from the effective date of the permit.
- *2 Requirements for this parameter are effective during the period beginning three (3) years from the effective date of the permit and lasting through the expiration date of the permit.
- *3 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting until EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05).
- *4 Requirements for this parameter are effective beginning the date EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05) and lasting through the expiration date of the permit.
- *5 See Part II.C.
- *6 See Part III.I.
- *7 These limits shall again be in effect if discharge at Outfall 001 ceases.

OUTFALL 002

Discharge Type: Continuous

Latitude 36°41'31.36"N, Longitude 105°37'16.58"W

Elevation: 7226.3 feet

During the period beginning after commencement of discharge at Outfall 001 and lasting through the expiration date of the permit or until discharge at Outfall 001 ceases (*7),

the permittee is authorized to discharge seepage from the tailings impoundment to the Red River in Segment No. 20.6.4.122 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

pH RANGE

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (UNITS AS STATED)	
	MINIMUM	MAXIMUM
pH (Standard Units) STORET: 00400	6.6	8.8

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
pH (Standard Units) STORET: 00400	1/Week	Grab

CHEMICAL/PHYSICAL/BIOCHEMICAL

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING (LBS/DAY UNLESS STATED)		QUALITY/CONCENTRATION (mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow STORET: 50050	Report MGD	Report MGD	***	***
Total Suspended Solids STORET: 00530	109	164	20	30
Total Arsenic STORET: 01002	0.2	0.32	0.039	0.059
Total Cadmium (*1) STORET: 01027	0.016	0.024	0.003	0.0044
Total Cadmium (*2) STORET: 01027	0.0022	0.0033	0.0004	0.0006
Total Copper STORET: 01042	0.175	0.27	0.032	0.049
Total Cyanide STORET: 00720	0.02	0.029	0.0147	0.022
Fluoride STORET: 00951	16.4	16.4	3.0	3.0

Total Lead	0.13	0.19	0.023	0.035
STORET: 01051				
Total Manganese	5.46	8.2	1.0	1.5
STORET: 01055				
Total Mercury (*3)	0.000087	0.00013	0.000016	0.000024
STORET: 71900				
Total Mercury (*4)	0.0029	0.0045	0.001	0.0015
STORET: 71900				
Total Molybdenum (*3)	4.13	6.2	1.34	2.01
STORET: 01062				
Total Molybdenum (*4)	3.9	5.8	1.32	1.98
STORET: 01062				
Total Zinc	0.58	0.58	0.2	0.2
STORET: 01092				
Total Aluminum	0.169	0.25	0.058	0.087
STORET: 01105				
Total Gross Alpha (*8)	N/A	N/A	19.8 pCi/l	29.7 pCi/l
STORET: 01501				

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Record
STORET: 50050		
Total Suspended Solids	1/Quarter	24-Hr. Composite (*5)
STORET: 00530		
Total Arsenic	1/Month	24-Hr. Composite (*5)
STORET: 01002		
Total Cadmium	1/Month	24-Hr. Composite (*5)
STORET: 01027		
Total Copper	1/Month	24-Hr. Composite (*5)
STORET: 01042		
Total Cyanide	1/Month	24-Hr. Composite (*3)
STORET: 00720		
Fluoride	1/Quarter	24-Hr. Composite (*5)
STORET: 00951		
Total Iron	1/Month	24-Hr. Composite (*5)
STORET: 01045		
Total Lead	1/Month	24-Hr. Composite (*5)
STORET: 01051		
Total Manganese	1/Month	24-Hr. Composite (*5)
STORET: 01055		
Total Mercury	1/Month	24-Hr. Composite (*5)
STORET: 71900		
Total Molybdenum	1/Quarter	24-Hr. Composite (*5)
STORET: 01062		
Total Zinc	1/Quarter	24-Hr. Composite (*5)
STORET: 01092		
Total Aluminum	1/Month	24-Hr. Composite (*5)
STORET: 01105		
Radiation: Total Gross Alpha (*9)	1/Week	Grab
STORET: 01501		

 WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*4)		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	****	Report
STORET: TOP6C	****	Report
STORET: TPP6C	****	Report
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	****	Report
STORET: TOP3B	****	Report
STORET: TPP3B	****	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	1/quarter	24-Hr. Composite (*5)
STORET: TOP6C	1/quarter	24-Hr. Composite (*5)
STORET: TPP6C	1/quarter	24-Hr. Composite (*5)
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	1/quarter	24-Hr. Composite (*5)
STORET: TOP3B	1/quarter	24-Hr. Composite (*5)
STORET: TPP3B	1/quarter	24-Hr. Composite (*5)

 SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): After collection of the combined seepage from the tailings impoundment and prior to discharge to the Red River.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

observation shall be reported to the Agencies within fourteen days of identification of the change. This fourteen day reporting requirement applies to Portal Spring (located below the Sugar Shack South Rock Pile in the vicinity of the Old Mill), Spring 13, and Spring 39. This permit may be reopened if any significant increase in discharge or seepage occurs or if it is determined that existing seepage in other locations is hydrologically connected to the mine.

B. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

C. COMPOSITE SAMPLING (24-HOUR)

The term "24-hour composite sample" means a sample consisting of a minimum of three (3) aliquots of effluent collected at regular intervals over a normal 24-hour operating period and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

D. CYANIDE EFFLUENT TEST PROCEDURES

To comply with the sampling and analysis requirements for total cyanide and cyanide amenable to chlorination, the permittee shall use an approved test procedure at 40CFR136. If the analysis of cyanide amenable to chlorination is subject to matrix interferences, the weak acid dissociable cyanide method (Method 4500 CN I - Standard Methods, latest edition approved in 40CFR136) may be substituted for this parameter. The permittee may use ion chromatographic separation - amperometric detection (IC method) as a substitute for the colorimetric detection steps in any of the above cyanide methods. No other modifications of the above methods are authorized by this provision unless such modifications are approved in writing by the permitting authority.

E. MOLYBDENUM EFFLUENT TEST PROCEDURES

The Molycorp thiocyanate colorimetric method is approved for the analysis of molybdenum unless subsequently determined to be inappropriate by the NMED or EPA.

F. TAILINGS SPILL MONITORING REQUIREMENTS

As soon as practicable after the arrival of Molycorp's environmental staff at the site of a tailings spill that reaches the Red River, but no later than two (2) hours after arrival at the site, water quality sampling shall commence. Samples shall be taken at three sites:

- (1) Approximately 100 feet above the point where tailings enter the river;

- (2) Approximately 100 feet below the point where tailings enter the river; and
- (3) Approximately one-half mile below the point where tailings enter the river.

All samples shall be properly preserved and analyzed for:

Chemical Oxygen Demand
Total Suspended Solids
Total Arsenic
Total Cadmium
Total Copper
Total Cyanide
Fluoride
Total Iron
Total Lead
Total Manganese
Total Mercury
Total Molybdenum
Total Zinc
Total Aluminum
Total Boron
Total Chromium
Total Cobalt
Total Selenium
Total Vanadium
Total Beryllium
Total Nickel
Total Silver
Un-ionized Ammonia (as N)
Total Residual Chlorine
Temperature
pH

The results of the analysis shall be submitted to the EPA and the NMED within 30 days following a tailings spill.

Consistent with the procedures described in the Preventative Maintenance and Surveillance Plan and the Contingency Action and Reporting Plan (June 1975), a written report containing the following information will be sent to the EPA and the NMED within ten (10) days following any spill:

- (1) Date of Spill.

I. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

Pollutant	MQL ug/l	REQUIRED EPA Test Method	Pollutant	MQL ug/l	REQUIRED EPA Test Method
Aluminum	100	202.2 or 200.7	Cyanide	10	335.2
Antimony	60	200.7	Lead	5	239.2 or 200.7
Arsenic	10	206.2 or 200.7	Mercury	0.2	245.1
Barium	10	208.2	Molybdenum	30	200.7
Beryllium	5	200.7	Nickel	40	200.7
Cadmium	1	213.2 or 200.7	Selenium	5	270.2
Chromium	10	200.7	Silver	2	272.2
Chromium (III) (trivalent)	10	200.7	Thallium	10	279.2
Chromium (VI) (hexavalent)	10	200.7	Zinc	20	200.7
Copper	10	220.2 or 200.7	Total Phenols	5	420.1
2,3,7,8-TCDD	0.00001	625 Scan	PCB-1242	1.0	608
Aldrin	0.05	608	PCB-1254	1.0	608
Chlordane	0.2	608	PCB-1221	1.0	608
DDT	0.1	608	PCB-1232	1.0	608
Dieldrin	0.1	608	PCB-1248	1.0	608
Toxaphene	5	608	PCB-1260	1.0	608
Tetrachloroethylene	10	624	PCB-1016	1.0	608
Benzo(a)pyrene	10	625			
Hexachlorobenzene	10	625			

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40CFR136. For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to the EPA Region 6 NPDES Permits Branch (6WQ-P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by the EPA Region 6 NPDES Permits Branch (6WQ-P), the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

J. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

i. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 001 and 002

REPORTED ON DMR AS FINAL OUTFALL: 002

CRITICAL DILUTION (%): 12% when discharge is only made at Outfall 002 and 40% when discharge is made concurrently from Outfall 001 and 002

EFFLUENT DILUTION SERIES (%): 3%, 6%, 12%, 24%, and 48% when discharge is only made from Outfall 002

23%, 30%, 40%, 53%, and 71% when discharge is concurrently made from Outfalls 001 and 002

COMPOSITE SAMPLE TYPE: Defined at PART 1

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from



Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

NPDES Permit No. **NM0022306**

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended,
(33 U.S.C. 1251 et. seq; the "Act"),

Molycorp, Inc.
P.O. Box 469
Questa, New Mexico 87556

is authorized to discharge from a facility located near Questa in Taos County,

to receiving waters named the Red River, Waterbody Segment Code No. 20.6.4.122 of the Rio Grande Basin,

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Parts I [Requirements for NPDES Permits - 18 pages], II [Other Conditions - 23 pages], and III [Standard Conditions for NPDES Permits - 8 pages] hereof.

This permit supersedes and replaces NPDES Permit No. NM0022306 issued December 8, 2000

This permit shall become effective on October 1, 2006

This permit and the authorization to discharge shall expire at midnight, September 30, 2011

Issued on August 29, 2006

Prepared by


Miguel I. Flores

Director
Water Quality Protection Division (6WQ)


J. Scott Wilson

Environmental Scientist
NPDES Permits Branch (6WQ-P)

PART I - REQUIREMENTS FOR NPDES PERMITSA. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOUTFALL 001

Discharge Type: Intermittent

Latitude 36°41'40.15"N, Longitude 105°38'3.37"W

Elevation: 7331.2 feet

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge process water from milling operations and tailings disposal, including mine de-watering and interceptor wells, to the Red River in Segment No. 20.6.4.122 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>PARAMETERS/STORET CODES</u>		<u>DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS</u>	
		<u>QUALITY (UNITS AS STATED)</u>	
		<u>MINIMUM</u>	<u>MAXIMUM</u>
pH (Standard Units)		6.6	8.8
STORET: 00400			

<u>PARAMETERS/STORET CODES</u>		<u>MONITORING REQUIREMENTS</u>	
		<u>FREQUENCY OF ANALYSIS</u>	<u>SAMPLE TYPE</u>
pH (Standard Units)		1/Week	Grab
STORET: 00400			

<u>PARAMETERS/STORET CODES</u>		<u>DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS</u>			
		<u>QUANTITY/LOADING</u>		<u>QUALITY/CONCENTRATION</u>	
		<u>(LBS/DAY UNLESS STATED)</u>		<u>(mg/L UNLESS STATED)</u>	
		<u>MONTHLY AVG</u>	<u>DAILY MAX</u>	<u>MONTHLY AVG</u>	<u>DAILY MAX</u>
		<u>Report MGD</u>	<u>Report MGD</u>	<u>****</u>	<u>****</u>
Flow					
STORET: 50050					
Chemical Oxygen Demand		2147	3220	60	90
STORET: 00340					
Total Suspended Solids		716	1073	20	30
STORET: 00530					
Total Arsenic		1.4	2.11	0.039	0.059

STORET: 01002				
Total Cadmium	0.014	0.021	0.0004	0.0006
STORET: 01027				
Total Copper	1.14	1.75	0.032	0.049
STORET: 01042				
Total Cyanide	0.249	0.374	0.007	0.01
STORET: 00720				
Fluoride	107	107	3.0	3.0
STORET: 00951				
Total Iron	21.5	21.5	0.6	0.6
STORET: 01045				
Total Lead	0.82	1.25	0.023	0.035
STORET: 01051				
Total Manganese	35.8	53.7	1.0	1.5
STORET: 01055				
Total Mercury (*1)	0.00057	0.00086	0.000016	0.000024
STORET: 71900				
Total Mercury (*2)	0.000047	0.00007	0.001	0.0015
STORET: 71900				
Total Molybdenum	47	70.8	1.32	1.98
STORET: 01062				
Total Zinc	7.16	7.16	0.2	0.2
STORET: 01092				
Total Aluminum	2.075	3.11	0.058	0.087
STORET: 01105				
Total Gross Alpha (*5)	N/A	N/A	19.8 pCi/l	29.7 pCi/l
STORET: 01501				

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Record
STORET: 50050		
Chemical Oxygen Demand	1/Month	24-Hr. Composite (*3)
STORET: 00340		
Total Suspended Solids	1/Month	24-Hr. Composite (*3)
STORET: 00530		
Total Arsenic	1/Month	24-Hr. Composite (*3)
STORET: 01002		
Total Cadmium	1/Week	24-Hr. Composite (*3)
STORET: 01027		
Total Copper	1/Week	24-Hr. Composite (*3)
STORET: 01042		
Total Cyanide	1/Month	24-Hr. Composite (*3)
STORET: 00720		
Fluoride	1/Month	24-Hr. Composite (*3)
STORET: 00951		
Total Iron	1/Month	24-Hr. Composite (*3)
STORET: 01045		
Total Lead	1/Week	24-Hr. Composite (*3)
STORET: 01051		
Total Manganese	1/Month	24-Hr. Composite (*3)

STORET: 01055		
Total Mercury	1/Week	24-Hr. Composite (*3)
STORET: 71900		
Total Molybdenum	1/Month	24-Hr. Composite (*3)
STORET: 01062		
Total Zinc	1/Month	24-Hr. Composite (*3)
STORET: 01092		
Total Aluminum	1/Week	24-Hr. Composite (*3)
STORET: 01105		
Radiation: Total Gross Alpha (*2)	1/Week	Grab
STORET: 01501		

WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*4)		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	****	Report
STORET: TOP6C	****	Report
STORET: TPP6C	****	Report
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	****	Report
STORET: TOP3B	****	Report
STORET: TPP3B	****	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	1/quarter	24-Hr. Composite (*3)
STORET: TOP6C	1/quarter	24-Hr. Composite (*3)
STORET: TPP6C	1/quarter	24-Hr. Composite (*3)
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	1/quarter	24-Hr. Composite (*3)
STORET: TOP3B	1/quarter	24-Hr. Composite (*3)
STORET: TPP3B	1/quarter	24-Hr. Composite (*3)

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after final treatment and prior to discharge to the Red River.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the **NO DISCHARGE** box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

FOOTNOTES

- *1 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting until EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05).
- *2 Requirements for this parameter are effective beginning the date EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05) and lasting through the expiration date of the permit.
- *3 See Part II.C and II.H..
- *4 See Part II.J.
- *5 EPA Method 900

OUTFALL 002

Discharge Type: Continuous

Latitude 36°41'31.36"N, Longitude 105°37'16.58"W

Elevation: 7226.3 feet

During the period beginning the effective date of the permit and lasting until commencement of discharge at Outfall 001 (*7),

the permittee is authorized to discharge seepage from the tailings impoundment to the Red River in Segment No. 20.6.4.122 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

pH RANGE	

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (UNITS AS STATED)	
	MINIMUM	MAXIMUM
pH (Standard Units) STORET: 00400	6.6	8.8

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
pH (Standard Units) STORET: 00400	1/Week	Grab

CHEMICAL/PHYSICAL/BIOCHEMICAL	

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING (LBS/DAY UNLESS STATED)		QUALITY/CONCENTRATION (mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow STORET: 50050	Report MGD	Report MGD	****	****
Total Suspended Solids STORET: 00530	58	87.6	20	30
Total Arsenic STORET: 01002	1.2	1.8	0.22	0.33
Total Cadmium (*1) STORET: 01027	0.026	0.038	0.0048	0.007
Total Cadmium (*2) STORET: 01027	0.009	0.013	0.0016	0.0024
Total Copper STORET: 01042	0.12	0.18	0.032	0.049
Total Cyanide STORET: 00720	0.0429	0.064	0.0147	0.022
Fluoride STORET: 00951	16.4	16.4	3.0	3.0

Total Lead STORET: 01051	0.55	0.82	0.1	0.15
Total Manganese STORET: 01055	5.46	8.2	1.0	1.5
Total Mercury (*3) STORET: 71900	0.0006	0.00093	0.00011	0.00017
Total Mercury (*4) STORET: 71900	0.000336	0.0005	0.001	0.0014
Total Molybdenum STORET: 01062	9.6	14.7	3.3	5.03
Total Zinc STORET: 01092	0.58	0.58	0.2	0.2
Total Aluminum STORET: 01105	0.169	0.254	0.058	0.087

PARAMETERS/STORET CODESMONITORING REQUIREMENTS

	<u>FREQUENCY OF ANALYSIS</u>	<u>SAMPLE TYPE</u>
Flow STORET: 50050	Continuous	Record
Total Suspended Solids STORET: 00530	1/Quarter	24-Hr. Composite (*5)
Total Arsenic STORET: 01002	1/Month	24-Hr. Composite (*5)
Total Cadmium STORET: 01027	1/Month	24-Hr. Composite (*5)
Total Copper STORET: 01042	1/Month	24-Hr. Composite (*5)
Fluoride STORET: 00951	1/Quarter	24-Hr. Composite (*5)
Total Iron STORET: 01045	1/Month	24-Hr. Composite (*5)
Total Lead STORET: 01051	1/Month	24-Hr. Composite (*5)
Total Manganese STORET: 01055	1/Month	24-Hr. Composite (*5)
Total Mercury STORET: 71900	1/Month	24-Hr. Composite (*5)
Total Molybdenum STORET: 01062	1/Quarter	24-Hr. Composite (*5)
Total Zinc STORET: 01092	1/Quarter	24-Hr. Composite (*5)
Total Aluminum STORET: 01105	1/Month	24-Hr. Composite (*5)

WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*6)		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	****	Report
STORET: TOP6C	****	Report
STORET: TPP6C	****	Report
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	****	Report
STORET: TOP3B	****	Report
STORET: TPP3B	****	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	1/quarter	24-Hr. Composite (*5)
STORET: TOP6C	1/quarter	24-Hr. Composite (*5)
STORET: TPP6C	1/quarter	24-Hr. Composite (*5)
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	1/quarter	24-Hr. Composite (*5)
STORET: TOP3B	1/quarter	24-Hr. Composite (*5)
STORET: TPP3B	1/quarter	24-Hr. Composite (*5)

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): After collection of the combined seepage from the tailings impoundment and prior to discharge to the Red River.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

FOOTNOTES

- *1 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting through one (1) day prior to three (3) years from the effective date of the permit.
- *2 Requirements for this parameter are effective during the period beginning three (3) years from the effective date of the permit and lasting through the expiration date of the permit.
- *3 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting until EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05).
- *4 Requirements for this parameter are effective beginning the date EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05) and lasting through the expiration date of the permit.
- *5 See Part II.D.
- *6 See Part II.I.
- *7 These limits shall again be in effect if discharge at Outfall 001 ceases.

OUTFALL 002

Discharge Type: Continuous

Latitude 36°41'31.36"N, Longitude 105°37'16.58"W

Elevation: 7226.3 feet

During the period beginning after commencement of discharge at Outfall 001 and lasting through the expiration date of the permit or until discharge at Outfall 001 ceases (*7) ,

the permittee is authorized to discharge seepage from the tailings impoundment to the Red River in Segment No. 20.6.4.122 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

pH RANGE

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (UNITS AS STATED)	
	MINIMUM	MAXIMUM
pH (Standard Units) STORET: 00400	6.6	8.8

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
pH (Standard Units) STORET: 00400	1/Week	Grab

CHEMICAL/PHYSICAL/BIOCHEMICAL

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING (LBS/DAY UNLESS STATED)		QUALITY/CONCENTRATION (mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report MGD	Report MGD	****	****
STORET: 50050				
Total Suspended Solids	109	164	20	30
STORET: 00530				
Total Arsenic	0.2	0.32	0.039	0.059
STORET: 01002				
Total Cadmium (*1)	0.016	0.024	0.003	0.0044
STORET: 01027				
Total Cadmium (*2)	0.0022	0.0033	0.0004	0.0006
STORET: 01027				
Total Copper	0.175	0.27	0.032	0.049
STORET: 01042				
Total Cyanide	0.0429	0.064	0.0147	0.022
STORET: 00720				
Fluoride	16.4	16.4	3.0	3.0
STORET: 00951				

Total Lead STORET: 01051	0.13	0.19	0.023	0.035
Total Cyanide STORET: 00720	0.02	0.029	0.0147	0.022
Total Manganese STORET: 01055	5.46	8.2	1.0	1.5
Total Mercury (*3) STORET: 71900	0.000087	0.00013	0.000016	0.000024
Total Mercury (*4) STORET: 71900	0.0029	0.0045	0.001	0.0015
Total Molybdenum (*3) STORET: 01062	4.13	6.2	1.34	2.01
Total Molybdenum (*4) STORET: 01062	3.9	5.8	1.32	1.98
Total Zinc STORET: 01092	0.58	0.58	0.2	0.2
Total Aluminum STORET: 01105	0.169	0.25	0.058	0.087
Total Gross Alpha (*8) STORET: 01501	N/A	N/A	19.8 pCi/l	29.7 pCi/l

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow STORET: 50050	Continuous	Record
Total Suspended Solids STORET: 00530	1/Quarter	24-Hr. Composite (*5)
Total Arsenic STORET: 01002	1/Month	24-Hr. Composite (*5)
Total Cadmium STORET: 01027	1/Month	24-Hr. Composite (*5)
Total Copper STORET: 01042	1/Month	24-Hr. Composite (*5)
Fluoride STORET: 00951	1/Quarter	24-Hr. Composite (*5)
Total Iron STORET: 01045	1/Month	24-Hr. Composite (*5)
Total Lead STORET: 01051	1/Month	24-Hr. Composite (*5)
Total Manganese STORET: 01055	1/Month	24-Hr. Composite (*5)
Total Mercury STORET: 71900	1/Month	24-Hr. Composite (*5)
Total Molybdenum STORET: 01062	1/Quarter	24-Hr. Composite (*5)
Total Zinc STORET: 01092	1/Quarter	24-Hr. Composite (*5)
Total Aluminum STORET: 01105	1/Month	24-Hr. Composite (*5)
Radiation: Total Gross Alpha (*9) STORET: 01501	1/Week	Grab

WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*4)		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	****	Report
STORET: TOP6C	****	Report
STORET: TPP6C	****	Report
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	****	Report
STORET: TOP3B	****	Report
STORET: TPP3B	****	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing		
(7-Day Static Renewal)		
<u>Pimephales promelas</u>		
STORET: TLP6C	1/quarter	24-Hr. Composite (*5)
STORET: TOP6C	1/quarter	24-Hr. Composite (*5)
STORET: TPP6C	1/quarter	24-Hr. Composite (*5)
<u>Ceriodaphnia dubia</u>		
STORET: TLP3B	1/quarter	24-Hr. Composite (*5)
STORET: TOP3B	1/quarter	24-Hr. Composite (*5)
STORET: TPP3B	1/quarter	24-Hr. Composite (*5)

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): After collection of the combined seepage from the tailings impoundment and prior to discharge to the Red River.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

FOOTNOTES

- *1 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting through one (1) day prior to three (3) years from the effective date of the permit.
- *2 Requirements for this parameter are effective during the period beginning three (3) years from the effective date of the permit and lasting through the expiration date of the permit.
- *3 Requirements for this parameter are effective during the period beginning the effective date of the permit and lasting until EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05).
- *4 Requirements for this parameter are effective beginning the date EPA approves the New Mexico State Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC, effective 7/17/05) and lasting through the expiration date of the permit.
- *5 See Part II.D.
- *6 See Part II.I.
- *7 When no discharge is made at Outfall 001, limits for Outfall 002 begining on page 5 of Part I of this permit shall be in effect.
- *8 EPA Method 900

OUTFALL 004 and 005

Discharge Type: Intermittent

Outfall 004: Latitude 36°41'13.76"N, Longitude 105°32'6.54"W
Elevation: 7838.8 feetOutfall 005: Latitude 36°41'42"N, Longitude 105°29'22"W
Elevation: 8124.5 feet

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge periodic mine drainage consisting only of mine contacted surface storm water runoff to the Red River in Segment No. 20.6.4.122 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>pH RANGE</u>	
<u>PARAMETERS/STORET CODES</u>	<u>DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS</u>
	<u>QUALITY (UNITS AS STATED)</u>
	<u>MINIMUM</u> <u>MAXIMUM</u>
pH (Standard Units) STORET: 00400	6.6 8.8

<u>PARAMETERS/STORET CODES</u>	<u>MONITORING REQUIREMENTS</u>
	<u>FREQUENCY OF ANALYSIS</u> <u>SAMPLE TYPE</u>
pH (Standard Units)1/Day (*1)Grab STORET: 00400	

CHEMICAL/PHYSICAL/BIOCHEMICAL

<u>PARAMETERS/STORET CODES</u>	<u>DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS</u>			
	<u>QUANTITY/LOADING</u>		<u>QUALITY/CONCENTRATION</u>	
	<u>(LBS/DAY UNLESS STATED)</u>		<u>(mg/L UNLESS STATED)</u>	
	<u>MONTHLY AVG</u>	<u>DAILY MAX</u>	<u>MONTHLY AVG</u>	<u>DAILY MAX</u>
Flow STORET: 50050	Report MGD	Report MGD	****	****
Chemical Oxygen Demand STORET: 00340	****	****	125	125
Total Suspended Solids STORET: 00530	****	****	20	30
Total Arsenic STORET: 01002	****	****	0.255	0.340
Total Cadmium STORET: 01027	****	****	0.002	0.0025
Total Copper STORET: 01042	****	****	0.013	0.017
Total Lead STORET: 01051	****	****	0.063	0.084

Total Mercury STORET: 71900	****	****	0.0016	0.0024
Total Zinc STORET: 01092	****	****	0.2	0.2
Total Aluminum STORET: 01105	****	****	0.5	0.75
Total Silver STORET: 01077	****	****	0.003	0.005
Chlordane STORET: 39350	****	****	0.0016	0.0024
Total Residual Chlorine STORET: 50060	****	****	0.0127	0.019

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow STORET: 50050	1/Day (*1)	Measure (*3)(*2)
Chemical Oxygen Demand STORET: 00340	1/Day (*1)	24-Hr. Composite (*2)
Total Suspended Solids STORET: 00530	1/Day (*1)	24-Hr. Composite (*2)
Total Arsenic STORET: 01002	1/Day (*1)	24-Hr. Composite (*2)
Total Cadmium STORET: 01027	1/Day (*1)	24-Hr. Composite (*2)
Total Copper STORET: 01042	1/Day (*1)	24-Hr. Composite (*2)
Total Lead STORET: 01051	1/Day (*1)	24-Hr. Composite (*2)
Total Mercury STORET: 71900	1/Day (*1)	24-Hr. Composite (*2)
Total Zinc STORET: 01092	1/Day (*1)	24-Hr. Composite (*2)
Total Aluminum STORET: 01105	1/Month (*1)	24-Hr. Composite (*2)
Total Silver STORET: 01077	1/Month (*1)	24-Hr. Composite (*2)
Chlordane STORET: 39350	1/Month (*1)	24-Hr. Composite (*2)
Total Residual Chlorine STORET: 50060	1/Month (*1)	24-Hr. Composite (*2)

 WHOLE EFFLUENT TOXICITY TESTING

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	
	30-DAY AVG MINIMUM	48-Hr. MINIMUM
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*4)		
Daphnia pulex	REPORT	REPORT
Pimephales promelas	REPORT	REPORT
EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
	FREQUENCY	TYPE
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*4)		
Daphnia pulex	1/Quarter	24-Hr. Composite
Pimephales promelas	1/Quarter	24-Hr. Composite

 SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Prior to discharge from the settling basins.

DEFINITIONS

The term "runoff" shall mean the flow of storm water resulting from precipitation or snow/ice melt coming into contact with the industrial facility property.

The term "uncontaminated runoff" shall mean runoff which does not come into contact (other than incidental) with any raw material, intermediate product, finished product, by-product, or waste product located on the industrial facility property.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS OR VISIBLE FOAM

There shall be no discharge of floating solids or visible foam in other than trace amounts.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

FOOTNOTES

- *1 When discharging. See also additional sampling requirements in Part II.H of this permit.
- *2 See Part II.C.
- *3 By calibrated weir.
- *4 See Part II.K.

B. PROHIBITIONS

The discharge of pollutants traceable to point source mine operations through a hydrologic connection to the Red River shall be prohibited except in trace amounts. Operation of the Best Management Practices required by PART II.A. of this permit will constitute compliance with this prohibition at Spring 13, Spring 39, and springs in the vicinity of the old mill site below the Sugar Shack South deposit.

C. SCHEDULE OF COMPLIANCE

The permittee shall comply with the following schedule of activities for attainment of state water quality standards-based final effluent limitations for total cadmium at Outfall 002:

- a. Determine exceedance cause(s);
- b. Develop control options;
- c. Evaluate and select control mechanisms;
- d. Implement corrective action; and
- e. Attain final effluent limitations no later than three (3) years from the effective date of the permit.

The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports shall expire three (3) years from the effective date of the permit.

PROGRESS REPORT DATE

January 31
April 30
July 31
October 31

The quarterly progress reports shall include a discussion of the interim requirements that have been completed at the time of the report and shall address the progress towards attaining the state water quality standards-based final effluent limitations for total cadmium at Outfall 002 no later than three (3) years from the effective date of the permit.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fifteen (15) days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

D. REPORTING OF MONITORING RESULTS

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted monthly.

1. Reporting periods shall end on the last day of the month.
2. The permittee is required to submit regular monthly reports as described above postmarked no later than the following day of the month following each reporting period.

<u>STATE</u>	<u>DAY</u>
New Mexico Permits	15th

PART II - OTHER CONDITIONSA. BEST MANAGEMENT PRACTICES

The permittee shall maintain and operate the seepage interception and management system to comply with the prohibition against the discharge to the Red River of pollutants traceable to point source mine operations except in trace amounts. Implementation of these Best Management Practices (described below) is considered compliance with this prohibition.

Spring 13 is defined as the seepage zone located on the north side of the Red River at the southwest base of Goathill, just east of Capulin Canyon.

Spring 39 is defined as the seepage zone located on the north side of the Red River approximately 500 feet east of Goathill Campground.

The Spring 13 seepage interception system consists of a 1,000 foot long french drain with an approximate pumping rate of 50 gallons per minute. The french drain, placed at a depth of approximately two feet below the low water river surface and ten feet north of the river channel, shall be operated and maintained to capture shallow seepage flow along the river reach of the mouth of Capulin Canyon.

The Spring 39 seepage interception system consists of two french drains which are approximately 300 feet long with an approximate pumping rate of 95 gallons per minute. The two drains are installed adjacent and parallel to the location of the original drain installed in 2002. One drain is perforated on the top, similar to the original drain, and the other drain is perforated on the bottom. The operation of each drain can be controlled by a valve. The drains are placed at a depth approximately two feet below the low water river surface and extend along the toe of the embankment and are approximately ninety feet outside the stream channel. The system shall be operated and maintained to capture shallow seepage flow along the river reach below Goathill Gulch.

The three ground water withdrawal wells, located in the vicinity of the old mill, shall be operated and maintained to capture potential discharges from point source mine operations through a hydrologic connection below the Sugar Shack deposit.

The permittee shall conduct monthly visual inspections of the Red River and its banks in the vicinity of the facility at the following known historic seep and spring locations: Goathill Gulch Seep, Sulphur Gulch Seep, Portal Spring, Cabin Springs, Upper Spring 39, Shaft Springs, Spring 39, and Spring 13. Quantitative estimates of flow will be noted and evaluated to identify changes in discharge or seepage trends. Data obtained from monitoring wells located below the mine front waste rock piles may be substituted for visual observation of seeps and springs in that area. A report summarizing the monthly inspections shall be submitted annually based on the effective date of the permit to EPA Region 6 and NMED. In the event that the quantitative estimate of flow identifies and order of magnitude increase in the average discharge or seepage rates, the

observation shall be reported to the Agencies within fourteen days of identification of the change. This fourteen day reporting requirement applies to Portal Spring (located below the Sugar Shack South Rock Pile in the vicinity of the Old Mill), Spring 13, and Spring 39. This permit may be reopened if any significant increase in discharge or seepage occurs or if it is determined that existing seepage in other locations is hydrologically connected to the mine.

B. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.

C. COMPOSITE SAMPLING (24-HOUR)

Unless otherwise specified in this permit, the term "24-hour composite sample" means a sample consisting of a minimum of three (3) aliquots of effluent collected at regular intervals over a normal 24-hour operating period and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

D. CYANIDE EFFLUENT TEST PROCEDURES

To comply with the sampling and analysis requirements for total cyanide and cyanide amenable to chlorination, the permittee shall use an approved test procedure at 40CFR136. If the analysis of cyanide amenable to chlorination is subject to matrix interferences, the weak acid dissociable cyanide method (Method 4500 CN I - Standard Methods, latest edition approved in 40CFR136) may be substituted for this parameter. The permittee may use ion chromatographic separation - amperometric detection (IC method) as a substitute for the colorimetric detection steps in any of the above cyanide methods. No other modifications of the above methods are authorized by this provision unless such modifications are approved in writing by the permitting authority.

E. MOLYBDENUM EFFLUENT TEST PROCEDURES

The Molycorp thiocyanate colorimetric method is approved for the analysis of molybdenum unless subsequently determined to be inappropriate by the NMED or EPA.

F. TAILINGS SPILL MONITORING REQUIREMENTS

As soon as practicable after the arrival of Molycorp's environmental staff at the site of a tailings spill that reaches the Red River, but no later than two (2) hours after arrival at the site, water quality sampling shall commence. Samples shall be taken at three sites:

- (1) Approximately 100 feet above the point where tailings enter the river;

- (2) Approximately 100 feet below the point where tailings enter the river; and
- (3) Approximately one-half mile below the point where tailings enter the river.

All samples shall be properly preserved and analyzed for:

- Chemical Oxygen Demand
- Total Suspended Solids
- Total Arsenic
- Total Cadmium
- Total Copper
- Total Cyanide
- Fluoride
- Total Iron
- Total Lead
- Total Manganese
- Total Mercury
- Total Molybdenum
- Total Zinc
- Total Aluminum
- Total Boron
- Total Chromium
- Total Cobalt
- Total Selenium
- Total Vanadium
- Total Beryllium
- Total Nickel
- Total Silver
- Un-ionized Ammonia (as N)
- Total Residual Chlorine
- Temperature
- pH

The results of the analysis shall be submitted to the EPA and the NMED within 30 days following a tailings spill.

Consistent with the procedures described in the Preventative Maintenance and Surveillance Plan and the Contingency Action and Reporting Plan (June 1975), a written report containing the following information will be sent to the EPA and the NMED within ten (10) days following any spill:

- (1) Date of Spill.

(2) Time when the spill was observed and time when tailings flow into the river was stopped.

(3) Location (pipe or coupling number).

(4) Estimated amount of tailings that entered the river.

(5) Sketch and dimension of size of hole or failure that caused the spill.

(6) Position of failure in the pipe or coupling.

(7) Copy of the latest computer printout covering the pipe or coupling which failed.

(8) Comments, if required for clarification.

G. REOPENER CLAUSE

The permit may be modified or revoked and reissued if any of the following events occurs:

1. To address conditions of an EPA approved TMDL for chronic aluminum criteria developed for segment 20.6.4.122 of the Red River and approved by EPA
2. Should monitoring required under PART II.A. of this permit show that the seepage interception system is ineffective or find seepage traceable to point source mine operations, this permit may be modified or revoked and reissued to address those discharges.

H. HUMAN HEALTH MONITORING REQUIREMENTS

Within thirty minutes of initiating discharge, the permittee shall collect an effluent sample. The sample shall be analyze for the parameters listed below. A report summarizing the sample results shall be submitted to EPA and the New Mexico Environment Department with the monthly discharge monitoring report for the corresponding reporting period. The permit may be modified or revoked and reissued if monitoring demonstrates a potential to exceed New Mexico's water quality criteria for the protection of human health.

Outfall 001

Pollutants	CAS No.	Pollutants	CAS No.
Antimony,Dis.	7440-36-0	Cyanide, weak acid dis.	57-12-5
Nickel, Dis.	7440-02-0	2,3,7,8-TCDD	1746-01-6
Thallium, Dis.	7440-28-0	Acrolein	107-02-8

Acrylonitrile	107-13-0	1,2-Dichlorobenzene	95-50-1
Benzene	71-43-2	1,3-Dichlorobenzene	541-73-1
Bromoform	75-25-2	1,4-Dichlorobenzene	106-46-7
Carbon Tetrachloride	56-23-5	3,3'-Dichlorobenzidine	91-94-1
Chlorobenzene	108-90-7	Diethyl Phthalate	84-66-2
Chlorodibromomethane	124-48-1	Dimethyl Phthalate	131-11-3
Chloroform	67-66-3	Dibutyl Phthalate	84-74-2
Dichlorobromomethane	75-27-4	2,4-Dinitrotoluene	121-14-2
1,2-Dichloroethane	107-06-2	1,2-Diphenylhydrazine	122-66-7
1,1-Dichloroethylene	75-35-4	Fluoranthene	206-44-0
1,2-Dichloropropane	78-87-5	Fluorene	86-73-7
1,3-Dichloropropene	542-75-6	Hexachlorobenzene	118-74-1
Ethylbenzene	100-41-4	Hexachlorobutadiene	87-68-3
Methyl Bromide	74-83-9	Hexachlorocyclopentadiene	77-47-4
Methylene Chloride	75-09-2	Hexachloroethane	67-72-1
1,1,2,2-Tetrachloroethane	79-34-5	Indeno(1,2,3-cd)Pyrene	193-39-5
Tetrachloroethylene	127-18-4	Isophorone	78-59-1
Toluene	108-88-3	Nitrobenzene	98-95-3
1,2--trans-Dichloroethylene	156-60-5	n-Nitrodimethylamine	62-75-9
1,1,2-Trichloroethane	79-00-5	n-Nitrosodi-n-Propylamine	621-64-7
Trichloroethylene	79-01-6	n-Nitrosodiphenylamine	86-30-6
Vinyl Chloride	75-01-4	Pyrene	129-00-0
2-Chlorophenol	95-57-8	1,2,4-Trichlorobenzene	120-82-1
2,4-Dichlorophenol	120-83-2	Aldrin	309-00-2
2,4-Dimethylphenol	105-67-9	Alpha-BHC	319-84-6
2-Methyl-4,6-Dinitrophenol	534-52-1	Beta-BHC	319-85-7
2,4-Dinitrophenol	51-28-5	Gamma-BHC	58-89-9
Pentachlorophenol	87-86-5	Chlordane	57-74-9
Phenol	108-95-2	4,4'-DDT and derivatives	50-29-3
2,4,6-Trichlorophenol	88-06-2	Dieldrin	60-57-1
Acenaphthene	83-32-9	Alpha-Endosulfan	959-98-8
Anthracene	120-12-7	Beta-Endosulfan	33213-65-9
Benzidine	92-87-5	Endosulfan sulfate	1031-07-8
Benzo(a)anthracene	56-55-3	Endrin	72-20-8
Benzo(a)pyrene	50-32-8	Endrin Aldehyde	7421-93-4
Benzo(b)fluoranthene	205-99-2	Heptachlor	76-44-8
Benzo(k)fluoranthene	207-08-9	Heptachlor Epoxide	1024-57-3
Bis(2-chloroethyl)Ether	111-44-4	PCBs	1336-36-3
Bis(2-chloroisopropyl)Ether	108-60-1	Toxaphene	8001-35-2
Bis(2-ethylhexyl)Phthalate	117-81-7		
Butyl Benzyl Phthalate	85-68-7		
2-Chloronaphthalene	91-58-7		
Chrysene	218-01-9		
Dibenzo(a,h)anthracene	53-70-3		

I. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

Pollutant	MQL ug/l	REQUIRED EPA Test Method	Pollutant	MQL ug/l	REQUIRED EPA Test Method
Aluminum	100	202.2	Cyanide	10	335.2
Antimony	60	200.7	Lead	5	239.2
Arsenic	10	206.2	Mercury	0.2	245.1
Barium	10	208.2	Molybdenum	30	200.7
Beryllium	5	200.7	Nickel	40	200.7
Cadmium	1	213.2	Selenium	5	270.2
Chromium	10	200.7	Silver	2	272.2
Chromium (III) (trivalent)	10	200.7	Thallium	10	279.2
Chromium (VI) (hexavalent)	10	200.7	Zinc	20	200.7
Copper	10	220.2	Total Phenols	5	420.1
2,3,7,8-TCDD	0.00001	625 Scan	PCB-1242	1.0	608
Aldrin	0.05	608	PCB-1254	1.0	608
Chlordane	0.2	608	PCB-1221	1.0	608
DDT	0.1	608	PCB-1232	1.0	608
Dieldrin	0.1	608	PCB-1248	1.0	608
Toxaphene	5	608	PCB-1260	1.0	608
Tetrachloroethylene	10	624	PCB-1016	1.0	608
Benzo(a)pyrene	10	625			
Hexachlorobenzene	10	625			

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40CFR136. For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to the EPA Region 6 NPDES Permits Branch (6WQ-P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

Upon written approval by the EPA Region 6 NPDES Permits Branch (6WQ-P), the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

J. WHOLE EFFLUENT TOXICITY TESTING (7-DAY CHRONIC NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 001 and 002

REPORTED ON DMR AS FINAL OUTFALL: 002

CRITICAL DILUTION (%): 12% when discharge is only made at Outfall 002 and 40% when discharge is made concurrently from Outfall 001 and 002

EFFLUENT DILUTION SERIES (%): 3%, 6%, 12%, 24%, and 48% when discharge is only made from Outfall 002

23%, 30%, 40%, 53%, and 71% when discharge is concurrently made from Outfalls 001 and 002

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA/600/4-91/002 or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA/600/4-91/002, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from

the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.

- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. Test failure is defined as a demonstration of statistically significant sub-lethal or lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

a. Part I Testing Frequency Other Than Monthly

- i. The permittee shall conduct a total of two (2) additional tests for any species that demonstrates significant lethal effects at or below the critical dilution. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two additional tests in lieu of routine toxicity testing. The full report shall be prepared for each test required by this section in accordance with procedures outlined in Item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.
- ii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section. The permittee shall notify EPA in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may be also be required due to a demonstration of persistent significant sub-lethal effects or intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.
- iii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall henceforth increase the frequency of testing for this species to once per quarter for the life of the permit.

- iv. The provisions of Item 2.a are suspended upon submittal of the TRE Action Plan.

- b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at or below the critical dilution. A TRE may also be required due to a demonstration of persistent significant sub-lethal effects or intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONS

- a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- iii. 60% of the surviving control females must produce three broods.
- iv. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- v. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- vi. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

- i. For the Ceriodaphnia dubia survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/600/4-91/002 or the most recent update thereof.
- ii. For the Ceriodaphnia dubia reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-91/002 or the most recent update thereof.
- iii. If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;
 - (A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (A) a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - (B) the test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);

- (C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and
- (D) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item 1.a above.
- ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 4 of this section.
- v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

4. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/600/4-91/002, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- b. A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.
- c. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.
 - i. Pimephales promelas (Fathead Minnow)
 - (A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP6C.
 - (B) Report the NOEC value for survival, Parameter No. TOP6C.
 - (C) Report the NOEC value for growth, Parameter No. TPP6C.
 - D. If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP6C.
 - (E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.
 - ii. Ceriodaphnia dubia
 - (A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TLP3B.

- (B) Report the NOEC value for survival, Parameter No. TOP3B.
 - (C) Report the NOEC value for reproduction, Parameter No. TPP3B.
 - (D) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TGP3B.
 - (E) Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.
- d. Enter the following codes on the DMR for retests only:
- i. For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - ii. For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

Monitoring Frequency Reduction

- a. The permittee may apply for a testing frequency reduction upon the successful completion of the first four consecutive quarters of testing for one or both test species, with no lethal or sub-lethal effects demonstrated at or below the critical dilution. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than twice per year for the more sensitive test species (usually the *Ceriodaphnia dubia*).
- b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition the permittee must provide a list with each test performed including test initiation date, species, NOECs for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance System section to update the permit reporting requirements.
- c. SUB-LETHAL FAILURES - If, during the first four quarters of testing, sub-lethal effects are demonstrated to a test species, two monthly retests are required. In addition, quarterly testing is required for that species until the effluent passes both the lethal and sub-lethal test endpoints for the affected species for four consecutive quarters. Monthly retesting is not required if the permittee is performing a TRE.

- d. **SURVIVAL FAILURES** - If any test fails the survival endpoint at any time during the life of this permit, two monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is re-issued. Monthly retesting is not required if the permittee is performing a TRE.
- e. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the monitoring frequency for both test species reverts to once per quarter until the permit is re-issued.

5. **TOXICITY REDUCTION EVALUATION (TRE)**

- a. Within ninety (90) days of confirming lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:
 - i. **Specific Activities.** The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA-600/6-91/005F), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

- ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 48 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;
 - iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
 - iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- c. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
- i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.

A copy of the TRE Activities Report shall also be submitted to the state agency.

- d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the state agency.

- E. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

K. WHOLE EFFLUENT TOXICITY TESTING (48-HOUR ACUTE NOEC FRESHWATER)

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 004 and 005

REPORTED ON DMR AS FINAL OUTFALL: 004 and 005

CRITICAL DILUTION (%): 5

EFFLUENT DILUTION SERIES (%): 1.25, 2.5, 5, 10, and 20

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA/600/4-90/027F, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Lethal Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Acute test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.
- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

a. Part I Testing Frequency Other Than Monthly

- i. The permittee shall conduct a total of two (2) additional tests for any species that demonstrates significant lethal effects at or below the critical dilution. The two additional tests shall be conducted monthly during the next two consecutive months. The permittee shall not substitute either of the two additional tests in lieu of routine toxicity testing. The full report shall be prepared for each test required by this section in accordance with procedures outlined in Item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.
- ii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section. The permittee shall notify EPA in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.
- iii. If one or both of the two additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall henceforth increase the frequency of testing for this species to once per quarter for the life of the permit.

- iv. The provisions of Item 2.a are suspended upon submittal of the TRE Action Plan.

b. Part I Testing Frequency of Monthly

The permittee shall initiate the Toxicity Reduction Evaluation (TRE) requirements as specified in Item 5 of this section when any two of three consecutive monthly toxicity tests exhibit significant lethal effects at or below the critical dilution. A TRE may be also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.

3. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.
- ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: Daphnia pulex survival test.
- iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for: Daphnia pulex survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Daphnia pulex survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/600/4-90/027F or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;
 - (A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (A) a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - (B) the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);
 - (C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and
 - (D) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect two flow-weighted composite samples from the outfall(s) listed at Item 1.a above.
- ii. The permittee shall collect a second composite sample for use during the 24-hour renewal of each dilution concentration the for both tests. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples

shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage.

- iii. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 4 of this section.
- v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.

4. REPORTING

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA/600/4-90/027F, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- b. A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.

- c. The permittee shall report the following results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART IILD.4 of this permit. Submit retest information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.

Daphnia pulex

- i. If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
 - ii. Report the NOEC value for survival, Parameter No. TOM3D.
 - iii. Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.
- d. Enter the following codes on the DMR for retests only:
- i. For retest number 1, Parameter 22415, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."
 - ii. For retest number 2, Parameter 22416, enter a "1" if the NOEC for survival is less than the critical dilution; otherwise, enter a "0."

Monitoring Frequency

- a. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the life of this permit, two monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is re-issued. Monthly retesting is not required if the permittee is performing a TRE.
2. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the monitoring frequency for both test species reverts to once per quarter until the permit is re-issued.

5. TOXICITY REDUCTION EVALUATION (TRE)

- a. Within ninety (90) days of confirming lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent

toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:

- i. **Specific Activities.** The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

- ii. **Sampling Plan** (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 24 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

- iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
- iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- c. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
 - i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
 - ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to meet no significant lethality at the critical dilution.

A copy of the TRE Activities Report shall also be submitted to the state agency.

- d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in reduction of effluent toxicity to no significant lethality at the critical dilution. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the state agency.

- v. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

PART III - STANDARD CONDITIONS FOR NPDES PERMITSA. GENERAL CONDITIONS1. INTRODUCTION

In accordance with the provisions of 40 CFR Part 122.41, et. seq., this permit incorporates by reference ALL conditions and requirements applicable to NPDES Permits set forth in the Clean Water Act, as amended, (hereinafter known as the "Act") as well as ALL applicable regulations.

2. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. TOXIC POLLUTANTS

- a. Notwithstanding Part III.A.5, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.

5. PERMIT FLEXIBILITY

This permit may be modified, revoked and reissued, or terminated for cause in accordance with 40 CFR 122.62-64. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

6. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

7. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8. CRIMINAL AND CIVIL LIABILITY

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to 18 U.S.C. Section 1001.

9. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

10. STATE LAWS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

11. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

B. PROPER OPERATION AND MAINTENANCE1. NEED TO HALT OR REDUCE NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

2. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(REVISED 01-24-96)

3. PROPER OPERATION AND MAINTENANCE

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

4. BYPASS OF TREATMENT FACILITIES

a. **BYPASS NOT EXCEEDING LIMITATIONS**

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.B.4.b. and 4.c.

b. **NOTICE**

(1) **ANTICIPATED BYPASS**

If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPA Region 6 and NMED, if possible at least ten days before the date of the bypass.

(2) **UNANTICIPATED BYPASS**

The permittee shall, within 24 hours, submit notice of an unanticipated bypass as required in Part III.D.7.

c. **PROHIBITION OF BYPASS**

- (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
- (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the

exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

- (c) The permittee submitted notices as required by Part III.B.4.b.

- (2) The Director may allow an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions listed at Part III.B.4.c(1).

5. UPSET CONDITIONS

a. **EFFECT OF AN UPSET**

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Part III.B.5.b. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. **CONDITIONS NECESSARY FOR A DEMONSTRATION OF UPSET**

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required by Part III.D.7; and,
- (4) The permittee complied with any remedial measures required by Part III.B.2.

c. **BURDEN OF PROOF**

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. REMOVED SUBSTANCES

Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. PERCENT REMOVAL (PUBLICLY OWNED TREATMENT WORKS)

For publicly owned treatment works, the 30-day average (or Monthly Average) percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR 133.103.

C. MONITORING AND RECORDS**1. INSPECTION AND ENTRY**

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

2. REPRESENTATIVE SAMPLING

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

3. RETENTION OF RECORDS

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

4. RECORD CONTENTS

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) and time(s) analyses were performed;
- d. The individual(s) and laboratory who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

5. MONITORING PROCEDURES

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6. FLOW MEASUREMENTS

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

D. REPORTING REQUIREMENTS**1. PLANNED CHANGES**

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or,
- (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements listed at Part III.D.10.a.

2. ANTICIPATED NONCOMPLIANCE

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. TRANSFERS

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee

and incorporate such other requirements as may be necessary under the Act.

4. DISCHARGE MONITORING REPORTS AND OTHER REPORTS

Monitoring results must be reported on Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the "General Instructions" provided on the form. The permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA at the address below. Duplicate copies of DMR's and all other reports shall be submitted to the appropriate State agency(ies) at the following address(es):

EPA:
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

New Mexico:
Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
1190 Saint Francis Drive
Santa Fe, NM 87502

5. ADDITIONAL MONITORING BY THE PERMITTEE

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

6. AVERAGING OF MEASUREMENTS

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. TWENTY-FOUR HOUR REPORTING

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- (1) A description of the noncompliance and its cause;

- (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,

- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

- (2) Any upset which exceeds any effluent limitation in the permit; and,

- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours.

c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

8. OTHER NONCOMPLIANCE

The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B. (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.

9. OTHER INFORMATION

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

10. CHANGES IN DISCHARGES OF TOXIC SUBSTANCES

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) One hundred micrograms per liter (100 µg/L);
- (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
- (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

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- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) Five hundred micrograms per liter (500 µg/L);
- (2) One milligram per liter (1 mg/L) for antimony;
- (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
- (4) The level established by the Director.

11. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Director shall be signed and certified.

- a. ALL PERMIT APPLICATIONS shall be signed as follows:

- (1) FOR A CORPORATION - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
- (b) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) FOR A PARTNERSHIP OR SOLE PROPRIETORSHIP - by a general partner or the proprietor, respectively.

- (3) FOR A MUNICIPALITY, STATE, FEDERAL, OR OTHER PUBLIC AGENCY - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

- (a) The chief executive officer of the agency, or
- (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

- b. ALL REPORTS required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;

- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or an individual occupying a named position; and,

- (3) The written authorization is submitted to the Director.

c. CERTIFICATION

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

12. AVAILABILITY OF REPORTS

Except for applications, effluent data, permits, and other data specified in 40 CFR 122.7, any information submitted pursuant to this permit may be claimed as confidential by the submitter. If no claim is made at the time of submission, information may be made available to the public without further notice.

E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

1. CRIMINAL

a. NEGLIGENT VIOLATIONS

The Act provides that any person who negligently violates permit conditions implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

b. KNOWING VIOLATIONS

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

c. KNOWING ENDANGERMENT

The Act provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

d. FALSE STATEMENTS

The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both. (See Section 309.c 4 of the Clean Water Act)

2. CIVIL PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed \$27,500 per day for each violation.

3. ADMINISTRATIVE PENALTIES

The Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows:

a. CLASS I PENALTY

Not to exceed \$11,000 per violation nor shall the maximum amount exceed \$27,500.

b. CLASS II PENALTY

Not to exceed \$11,000 per day for each day during which the violation continues nor shall the maximum amount exceed \$137,500.

F. DEFINITIONS

All definitions contained in Section 502 of the Act shall apply to this permit and are incorporated herein by reference. Unless otherwise specified in this permit, additional definitions of words or phrases used in this permit are as follows:

1. ACT means the Clean Water Act (33 U.S.C. 1251 et. seq.), as amended.
2. ADMINISTRATOR means the Administrator of the U.S. Environmental Protection Agency.

3. APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.

4. APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the Act.

5. BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.

6. DAILY DISCHARGE means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day. "Daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be arithmetic average (weighted by flow value) of all samples collected during that sampling day.

7. DAILY MAXIMUM discharge limitation means the highest allowable "daily discharge" during the calendar month.

8. DIRECTOR means the U.S. Environmental Protection Agency Regional Administrator or an authorized representative.

9. ENVIRONMENTAL PROTECTION AGENCY means the U.S. Environmental Protection Agency.

10. GRAB SAMPLE means an individual sample collected in less than 15 minutes.

11. INDUSTRIAL USER means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.

12. MONTHLY AVERAGE (also known as DAILY AVERAGE) discharge limitations means the highest allowable average of "daily discharge(s)" over a calendar month, calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes daily average concentration effluent limitations or conditions, the daily average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily concentration, F = daily flow, and n = number of daily samples; daily average discharge =

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$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

13. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Act.
14. SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
15. SEWAGE SLUDGE means the solids, residues, and precipitates separated from or created in sewage by the unit processes of a publicly owned treatment works. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and storm water runoff, that are discharged to or otherwise enter a publicly owned treatment works.
16. TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.
17. UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
18. FOR FECAL COLIFORM BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
19. The term "MGD" shall mean million gallons per day.
20. The term "mg/L" shall mean milligrams per liter or parts per million (ppm).
21. The term "µg/L" shall mean micrograms per liter or parts per billion (ppb).

22. MUNICIPAL TERMS

- a. 7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.
- c. 24-HOUR COMPOSITE SAMPLE consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period, and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
- d. 12-HOUR COMPOSITE SAMPLE consists of 12 effluent portions collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
- e. 6-HOUR COMPOSITE SAMPLE consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.
- f. 3-HOUR COMPOSITE SAMPLE consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

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